

## B. Specification

Please amend the paragraph at page 1, line 13, through page 2, line 4, as follows:

--Biodegradable polymer materials ~~have been finding~~ are used in a wide variety of applications<sub>2</sub> including medical materials, drug delivery systems, and environmentally compatible materials. In recent years, in addition to those applications, there is a need for the biodegradable polymer materials ~~have been requested to provide~~ with new functions, and hence<sub>2</sub> various studies have been [[made]] conducted. In particular, the introduction of a chemically modifiable functional group into a molecule of a polyhydroxyalkanoate typified by polylactic acid has been examined. There has been reported a compound into which a carboxyl group or a vinyl group is introduced. For example, polymalic acid has been known as a polyhydroxyalkanoate having a carboxyl group at a side chain thereof. An  $\alpha$ -type represented by the chemical formula (39) and a  $\beta$ -type represented by the chemical formula (40) have been known as polymers of polymalic acid depending on the form of a polymer.--

Please amend the paragraph at page 83, line 9, through page 85, line 22, as follows:

--Examples of the compound represented by the chemical formula (34) include methyl chloroformate, ethyl chloroformate, propyl chloroformate, isopropyl chloroformate, butyl chloroformate, cyclohexyl chloroformate, benzyl chloroformate, methyl bromoformate, ethyl bromoformate, propyl bromoformate, isopropyl bromoformate, butyl bromoformate, cyclohexyl bromoformate, benzyl bromoformate,

methyl chloroacetate, ethyl chloroacetate, propyl chloroacetate, isopropyl chloroacetate, butyl chloroacetate, cyclohexyl chloroacetate, benzyl chloroacetate, methyl bromoacetate, ethyl bromoacetate, propyl bromoacetate, isopropyl bromoacetate, butyl bromoacetate, cyclohexyl bromoacetate, benzyl bromoacetate, methyl 3-chloropropionate, ethyl 3-chloropropionate, propyl 3-chloropropionate, isopropyl 3-chloropropionate, butyl 3-chloropropionate, cyclohexyl 3-chloropropionate, benzyl 3-chloropropionate, methyl 3-bromopropionate, ethyl 3-bromopropionate, propyl 3-bromopropionate, isopropyl 3-bromopropionate, butyl 3-bromopropionate, cyclohexyl 3-bromopropionate, benzyl 3-bromopropionate, methyl 4-chlorobutyrate, ethyl 4-chlorobutyrate, propyl 4-chlorobutyrate, isopropyl 4-chlorobutyrate, butyl 4-chlorobutyrate, cyclohexyl 4-chlorobutyrate, benzyl 4-chlorobutyrate, methyl 4-bromobutyrate, ethyl 4-bromobutyrate, propyl 4-bromobutyrate, isopropyl 4-bromobutyrate, butyl 4-bromobutyrate, cyclohexyl 4-bromobutyrate, benzyl 4-bromobutyrate, methyl 5-chlorovalerate, ethyl 5-chlorovalerate, propyl 5-chlorovalerate, isopropyl 5-chlorovalerate, butyl 5-chlorovalerate, cyclohexyl 5-chlorovalerate, benzyl 5-chlorovalerate, methyl 5-bromovalerate, ethyl 5-bromovalerate, propyl 5-bromovalerate, isopropyl 5-bromovalerate, butyl 5-bromovalerate, cyclohexyl 5-bromovalerate, benzyl 5-bromovalerate, methyl 6-chlorohexanoate, ethyl 6-chlorohexanoate, propyl 6-chlorohexanoate, isopropyl 6-chlorohexanoate, butyl 6-chlorohexanoate, cyclohexyl 6-chlorohexanoate, benzyl 6-chlorohexanoate, methyl 6-bromohexanoate, ethyl 6-bromohexanoate, propyl 6-bromohexanoate, isopropyl 6-bromohexanoate, butyl 6-bromohexanoate, cyclohexyl 6-bromohexanoate, benzyl 6-bromohexanoate, methyl 7-chloroheptanoate, ethyl 7-chloroheptanoate, propyl 7-chloroheptanoate, isopropyl 7-chloroheptanoate

chloroheptanoate, butyl 7-chloroheptanoate, cyclohexyl 7-chloroheptanoate, benzyl 7-chloroheptanoate, methyl 7-bromoheptanoate, ethyl 7-bromoheptanoate, propyl 7-  
~~bromoheptanotate~~ 7-bromoheptanoate, isopropyl 7-bromoheptanoate, butyl 7-bromoheptanoate, cyclohexyl 7-bromoheptanoate, benzyl 7-bromooctanoate, methyl 8-chlorooctanoate, ethyl 8-chlorooctanoate, propyl 8-chlorooctanoate, isopropyl 8-chlorooctanoate, butyl ~~8-chlorooctanotate~~ 8-chlorooctanoate, cyclohexyl 8-chlorooctanoate, benzyl 8-chlorooctanoate, methyl 8-bromooctanoate, ethyl 8-bromooctanoate, propyl 8-bromooctanoate, isopropyl 8-bromooctanoate, cyclohexyl 8-bromooctanoate, benzyl 8-bromooctanoate, methyl 9-chlorononanoate, ethyl 9-chlorononanoate, propyl 9-chlorononanoate, isopropyl 9-chlorononanoate, butyl 9-bromononanoate, cyclohexyl 9-chlorononanoate, benzyl 9-chlorononanoate, methyl 9-bromononanoate, ethyl 9-bromononanoate, propyl 9-bromononanoate, isopropyl 9-bromononanoate, butyl 9-bromononanoate, cyclohexyl 9-bromononanoate, and benzyl 9-bromononanoate.--

Please amend the paragraph at page 111, lines 11-21, as follows:

--8.49 g of a polymer was prepared in the same manner as in Example 5 except that 22.66 g (232.3 mmol) of ethyl ~~4-bromobutylate~~ 4-bromobutyrate was used instead of benzyl chloroformate. The resultant polymer was subjected to NMR analysis under the same conditions as those of Example 1. The analysis confirmed that the polymer was a polyhydroxyalkanoate containing a unit represented by the following chemical

formula (109). The analysis also confirmed that an A unit accounted for 10 mol% of the monomer unit and a B unit accounted for 90 mol% thereof.--

Please amend the paragraph at page 165, line 12, through page 166, line 13, as follows:

--Under a nitrogen atmosphere, 0.40 g of the polyhydroxyalkanoate copolymer composed of the unit represented by the chemical formula (124) synthesized in Example 14 (C: 11 mol%, D: 89 mol%) and 0.25 g (1.1 mmol) of 2-amino-1-naphthalene 2-amino-1-naphthalene sulfonic acid were placed in a 100-ml three-necked flask. 15.0 ml of pyridine was added to the flask, and the mixture was stirred. After that, 0.58 ml (2.2 mmol) of triphenyl phosphite was added. After that, 0.34 g of a polymer was prepared in the same manner as in Example 19. The resultant polymer was subjected to NMR analysis and Fourier transformation-infrared absorption spectral analysis under the same conditions as those of Example 19. As a result, it was confirmed that the resultant polymer was a polyhydroxyalkanoate containing a unit represented by the following chemical formula (158), and that the polyhydroxyalkanoate was a copolymer in which an E unit accounted for 11 mol% of the unit.--